

WHAT IS CLAIMED IS:

1. An absorbent article, at least a portion of which comprises a protease inhibitor having an IC_{50} of 30 μM or less, as measured by a Purified Protease Method.
2. The article of claim 1, characterized in that the IC_{50} is from 0.00001 μM to 30 μM , preferably from 0.0001 μM to 20 μM , more preferably from 0.001 μM to 10 μM .
3. An absorbent article, at least a portion of which comprises a protease inhibitor having an IC_{50} of 90 μM or less, as measured by a Specific Fecal Protease Method.
4. The article of claim 3 characterized in that the IC_{50} is from 0.00001 μM to 90 μM , preferably from 0.0001 μM to 30 μM , more preferably from 0.001 μM to 10 μM .
5. An absorbent article, at least a portion of which comprises a protease inhibitor characterized in that the protease inhibitor has an IC_{50} of 500 μM or less, as measured by a General Fecal Protease Method.
6. The article of claim 5 characterized in that the IC_{50} is no more than 500 μM , preferably no more than 300 μM , more preferably no more than 100 μM .
7. The article of any of claims 1-6, characterized in that the protease inhibitor is selected from the group consisting of a serine protease inhibitor, a metalloprotease inhibitor, a cysteine protease inhibitor, an aspartyl protease inhibitor, and mixtures thereof.

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8. The article of any of claims 1-7, characterized in that the protease inhibitor is selected from the group consisting of soybean trypsin inhibitor; lima bean protease inhibitor; corn protease inhibitor; Bowman Birk inhibitor; human pancreatic trypsin inhibitor; bovine pancreatic basic trypsin inhibitor; egg white trypsin inhibitor; egg white ovomucoids containing ovoinhibitors; chymostatin; aprotinin; leupeptin and its analogs; bestatin and its analogs; amastatin and its analogs; antipain; antithrombin III; hirudin; cystatin; E-64 and its analogs; α_2 -macroglobulin; α_1 -antitrypsin; pepstatin and its analogs; apstatin; (2R)-2-mercaptomethyl-4-methylpentanoyl-b-(2-naphthyl)-Ala-Ala amide; (2R)-2-mercaptomethyl-4-methylpentanoyl-Phe-Ala amide; N-acetyl-Leu-Leu-methioninal; N-acetyl-Leu-Leu-norleucinal; p-aminobenzoyl-Gly-Pro-D-Leu-D-Ala hydroxamic acid; 2(R)-[N-(4-methoxyphenylsulfonyl)-N-(3-pyridylmethyl)amino]-3-methylbutano-hydroxamic acid; hexamidine and its salts; pentamidine and its salts; benzamidine and its salts and derivatives; p-aminobenzamidine and its salts and derivatives; guanidinobenzoic acid and its salts and derivatives; and mixtures thereof.

9. The article of claim 5 or 6 wherein the protease inhibitor is 4-(2-aminoethyl)-benzenesulfonylfluoride hydrochloride;

10. The article of any of claims 1-9, characterized in that the article comprises from 0.0001% to 30%, by weight, of the protease inhibitor, preferably 0.0001% to 10%, by weight, of the protease inhibitor.

11. The article of any of claims 1-10, an extract of at least a portion of which produces at least a 10% reduction in substrate hydrolysis by a protease in the Absorbent Article Test Method.

12. The article of any of claims 1-11, further comprising a delivery system for containing the protease inhibitor and delivering the inhibitor to at least a portion of the skin of a wearer of the article.

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13. The article of claim 12, characterized in that the delivery system is a skin care composition characterized in that the skin care composition comprises from 0.01% to 50%, by weight, of the protease inhibitor, characterized in that at least a portion of the skin care composition is transferred from the article to a wearer's skin during wear of the article.

14. The article of claim 12 or 13, characterized in that the skin care composition comprises from 0.05% to 25%, by weight, of the protease inhibitor, preferably from 0.1% to 10%, by weight, of the protease inhibitor.

15. The article of any of claims 1-14, further comprising a wearer-contacting surface, characterized in that at least a portion of the wearer-contacting surface comprises the skin care composition containing the protease inhibitor; preferably the wearer-contacting surface is the topsheet.

16. An absorbent article, an extract of at least a portion of which produces at least a 10% reduction, preferably at least a 20% reduction, more preferably from a 50 to a 90% reduction, in substrate hydrolysis by a protease in the Absorbent Article Test Method.

17. An absorbent article containing a substance selected from the group consisting of soybean trypsin inhibitor; lima bean protease inhibitor; corn protease inhibitor; Bowman Birk inhibitor; human pancreatic trypsin inhibitor; bovine pancreatic basic trypsin inhibitor; egg white trypsin inhibitor; egg white ovomucoids containing ovoinhibitors; chymostatin; aprotinin; leupeptin and its analogs; bestatin and its analogs; amastatin and its analogs; antipain; antithrombin III; hirudin; cystatin; E-64 and its analogs; α_2 -macroglobulin; α_1 -antitrypsin; pepstatin and its analogs; apstatin; (2R)-2-mercaptomethyl-4-methylpentanoyl-b-(2-naphthyl)-Ala-Ala amide; (2R)-2-mercaptomethyl-4-methylpentanoyl-Phe-Ala amide; N-acetyl-Leu-Leu-methioninal; N-acetyl-Leu-Leu-norleucinal; p-aminobenzoyl-Gly-Pro-D-Leu-D-Ala hydroxamic acid; 2(R)-[N-(4-methoxyphenylsulfonyl)-N-(3-pyridylmethyl)amino]-3-

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30 methyl-butanohydroxamic acid; 4-(2-aminoethyl)-benzenesulfonylfluoride
hydrochloride; hexamidine and its salts; pentamidine and its salts; benzamidine and its
salts and derivatives; p-aminobenzamidine and its salts and derivatives;
guanidinobenzoic acid and its salts and derivatives; TLCK; TPCK; tranexamic acid;
and mixtures thereof.

18. The article of claim 17, characterized in that the substance is selected
from soybean trypsin inhibitor, aprotinin, hexamidine, p-aminobenzamidine,
leupeptin, pepstatin A, chymostatin, derivatives of guanidinobenzoic acid, and
mixtures thereof.

19. A method for reducing the proteolytic enzyme activity of a fecal
protease present in an absorbent article, comprising the steps of (i) incorporating a
protease inhibitor into at least a portion of an absorbent article in contact with feces;
and (ii) applying the article to a wearer such that the protease inhibitor contacts a
fecal protease.

20. A method for reducing the proteolytic enzyme activity of fecal
35 proteases on a portion of the skin in contact with an absorbent article, comprising the
steps of (i) releasably incorporating a protease inhibitor into a delivery system in the
absorbent article characterized in that the delivery system is capable of delivering the
inhibitor to at least a portion of the skin of a wearer of the article, and (ii) applying
the absorbent article to the skin of the wearer.

add A1

add
B.2

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